Amend the claims as follows:

1-12. (canceled)

13. (previously presented) A method of processing multicomponent of composite and combined materials, the method comprising the steps of:

mixing waste materials from electronic and electric devices and equipments, by using separated components, under the action of a moving bed of solid particles of a substance, yielding a mixture;

performing whirling movement, characterized in that the treated materials are pretreated by removing contaminating components containing toxic heavy metals and polychlorinated biphenyls by grinding the waste to particles having the size of 5 to 25 mm; and

subjecting the mixture in an inert environment at a temperature of 350° C. to 600° C. and at a pressure of 100 kPa to 10 MPa, to the action of blades of a rotational mechanism for 10 seconds to 10 minutes, wherein in the mixture occurs depolymerization, cracking and state transformation of macromolecular, solid and liquid organic fractions and their separation from the composite material in the form of organic vapors and gases, and disintegration of inorganic non-metallic fractions to small particles and increase of metal concentration in inorganic phase.

14. (presently amended) The method according to claim 13, characterized in that after removing the contaminating components containing toxic heavy metals and polychlorinated biphenyls and before the treatment in inert environment by the action of blades of a rotational mechanism iron parts are removed in a magnetic separator.

15. (presently amended) The method according to claim 13, characterized in that the treated materials are subjected to the action of blades of a rotational mechanism in the presence of lead and/or tin and/or zinc and/or mercury, added to the treatment process in an amount of 2 to 50% by weight.

16. (presently amended) The method according to claim 13, characterized in that the treated materials are subjected to the action of blades of a rotational mechanism in a reducing environment.

17. (presently amended) The method according to claim 13, characterized in that the treated materials are subjected to the action of blades of a rotational mechanism in an alkaline environment.

18. (presently amended) The method according to claim 142, characterized in that the treated materials are subjected to the action of blades of a rotational mechanism in an alkaline environment.

19. (presently amended) The method according to claim 153, characterized in that the treated materials are subjected to the action of blades of a rotational mechanism in an alkaline environment.

20. (presently amended) The method according to claim 13, characterized in that the inert environment is formed by nitrogen and/or carbon dioxide and/or water vapor and/or gaseous products of depolymerization, cracking and state transformation of the macromolecular, solid and liquid organic fractions, which are inert or act as inert under the above conditions.

21-23. (canceled)

24. (presently amended) The method according to claim 164, characterized in that the reducing environment is formed by hydrogen and/or hydrogen releasing substances and/or gaseous products of depolymerization, cracking and state transformation of the macromolecular, solid and liquid organic fractions, which act as reducing agents.

25. (canceled)

28. (presently amended) The method according to claim 175, characterized in that the alkaline environment is formed by solid particles of a substance, performing whirling movement and acting as alkaline, which substance is a solid alkaline absorbent~~, like calcium oxide and/or calcium carbonate and/or calcium hydroxide and/or sodium hydroxide and/or potassium hydroxide~~.

29. (presently amended) The method according to claim 13, characterized in that the solid particles of a substance, performing whirling movement, are formed partially or fully of a substance which acts under the reaction conditions catalytically on the running chemical reactions or it is a substance which is inert under the reaction conditions to the present reacting substances~~, such as granular quartz and/or silica sand and/or aluminosilicates and/or other natural and/or -synthetic-minerals, containing silicon~~

~~and/or aluminium and/or calcium and/or sodium and/or potassium and/or oxygen and/or sulfur~~.

30. (presently amended) The method according to claim 14~~2~~, characterized in that the solid particles of a substance, performing whirling movement, are formed partially or fully of a substance which acts under the reaction conditions catalytically on the running chemical reactions or it is a substance which is inert under the reaction conditions to the present reacting substances~~, such as granular quartz and/or silica sand and/or aluminosilicates and/or other natural and/or synthetic minerals, containing silicon and/or aluminium and/or calcium and/or sodium and/or potassium and/or oxygen and/or sulfur~~.

31. (presently amended) The method according to claim 13, characterized in that the solid particles of a substance, performing whirling movement, are formed partially or fully of a substance which results from disintegration of inorganic non-metallic fractions to the multicomponent, composite and combined materials to small particles and metal particles.

32. (canceled)

33. (new) The method of claim 28 wherein the solid alkaline absorbent is selected from the set consisting of calcium oxide, calcium carbonate, calcium hydroxide, sodium hydroxide and potassium hydroxide.

34. (new) The method of claim 29 wherein the solid particles of a substance, performing whirling movement, are selected from the set consisting of granular quartz, silica sand, and aluminosilicates.

35. (new) The method of claim 29 wherein the solid particles of a substance, performing whirling movement, are natural minerals containing silicon or aluminum or calcium or sodium or potassium or oxygen or sulfur.

36. (new) The method of claim 29 wherein the solid particles of a substance, performing whirling movement, are synthetic minerals containing silicon or aluminum or calcium or sodium or potassium or oxygen or sulfur.